

MEETING MINUTES

**United States Department of Agriculture (USDA)
Agricultural Air Quality Task Force Meeting (AAQTF)
Wyndham Bristol Hotel
Washington, DC
March 6, 1997**

Dr. Gary Margheim (NRCS) called the second day of the Agricultural Air Quality Task Force (AAQTF) to order. Margheim asked Dr. Michael A. Veenhuizen, who was absent on the first day, to answer the questions posed to the other Task Force members:

What organization(s) do you represent?

What biases do you bring with you?

What skills/experiences do you bring?

What are your personal expectations/goals for the Task Force?

Dr. Michael A. Veenhuizen

Agricultural Engineer

Livestock Engineering Solutions, Owner

Greenwood, IN

Dr. Veenhuizen apologized for missing the first day of the Task Force meeting and stated that he was in Oklahoma yesterday attending a workshop on swine odor emission control. He stated that he dealt primarily with animal production agriculture. Veenhuizen has served on the faculty at Ohio State University and Iowa State University. He continued saying that he enjoyed the challenges that America faced in the arena of dealing with air quality issues in agricultural production. Veenhuizen indicated that his sole bias was keeping agriculture a viable industry in America.

USDA's Tentative Comments to EPA's Proposed Standards - Dr. Joseph Glauber, USDA Chief Economist

There are a lot of people in this room who are more knowledgeable than myself on these issues, and I am keenly aware of this as I make this presentation. USDA has a draft set of comments. However, there are a number of issues that are still unanswered and USDA is trying to work these out at this time.

Thus, it is fair to say that there are a number of controversial issues that still remain to be resolved. For example, the Secretary indicated last week that he is very much concerned with ozone and particular matter. However, USDA will not likely comment on the health aspects of the standards because this is simply not our area of expertise. USDA will most likely stick to implementation issues and disproportional economic effects. In addition, USDA will have comments on monitoring, speciation, and a whole host of other implementation issues. USDA is still working with what concerns to raise, how vigorous the fight should be, and on what issues USDA will stand firm.

Whatever comments the Task Force has on these regulations need to be sent to me in the next few days. I will promise you that I will get these comments to the Secretary prior to our final, formal reply to EPA. USDA is more than happy to incorporate the Task Force's views into our comments. Hopefully, in the next week USDA can get resolution on these issues, get the Secretary to embody these comments, and get them to the EPA in a timely manner. If the Task Force has stronger feelings than what USDA has in the initial comments, we are more than willing to try and increase your involvement and views in our response to EPA.

Manuel Cunha (Nisei Farmers League) suggested that a number of the Task Force members would be contacted by members of the press/media and asked, "Did you give comments to the Secretary, and were they included in his comments to EPA." Cunha indicated that it would be important that the Task Force to draft some points of support to be presented to Paul Johnson that would subsequently be submitted to the Secretary. The Task Force must give a formal presentation that must go directly to the Secretary for inclusion in USDA's response. Cunha insisted that the Task Force must not walk away today without some strong resolutions that will be made available to the Secretary. He stressed that the Task Force is the Secretary's advisory board; if not, we become a paper Task Force and are worthless.

Glauber replied that obviously the Task Force was convened to brief the Secretary and that USDA welcomed any and all input from this group.

Dr. Calvin Parnell (Texas A&M University) stated that he was concerned about the statements made by EPA on the PM-2.5 standards regarding huge savings in agriculture. He concluded that this data was not based on very good science. Parnell indicated that he did not believe that the country would save \$1Billion on agriculture as a result of implementing these new standards.

Glauber reiterated that this is one of the areas of controversy. He said one of these issues is that crop yields will increase under lower ozone concentrations. He stated further that USDA simply cannot answer this conclusively at this time. When you get into costs, it is unclear exactly who pays the cost of lower ozone concentrations. USDA welcomes your comments on these issues.

Dr. Phillip Wakelyn (National Cotton Council of America) questioned if Glauber had data to support increased crop yields under lower ozone concentrations?

Glauber responded that the Agency did have such data.

John McClelland (USDA/Economic Research Service) stated that this conclusion depended on which model was used to make the predictions. He said that there have been two analyses (e.g., dose-response type exercise) done and the results have been compiled.

Parnell asked to respond to this issue. He stated that when he recently attended an EPA briefing where the new ozone standard was discussed, he learned that the difference between the current 0.12 ppm, one hour standard and the proposed 0.08 ppm, eight hour standard were essentially minimal.

Sally Shaver (U.S. Environmental Protection Agency) responded that this similarity has to do with the form of the standard and not the threshold of the standard.

Dr. Keith Saxton (USDA/Agricultural Research Service) asked Glauber if he could outline what his response committee was doing and addressing so the Task Force did not miss the target?

Glauber responded that the USDA was addressing the implications of the standards (e.g., costs) and these comments are at best a draft at this point. There are still controversies to be resolved. Glauber indicated that USDA would comment on monitoring and implementation issues for both ozone and PM.

He stressed that although it will be one submittal, the response would be a very diverse group of comments.

Margheim questioned if the Task Force could reach consensus on the concerns that it needed to get ultimately to the Secretary?

Dennis Tristao (J.G. Boswell Company) commented that after the individual Work Group reports are presented, the Task Force would be in a better position to make these suggestions than at the current time. He indicated that it should be a simple exercise to convert the Work Group results into recommendations for the Secretary. Tristao stated that it appeared the way the process was unfolding that these comments were not intended to blame any one agency, but simply to raise important concerns.

Emmett Barker (Equipment Manufacturers Institute) reminded the group that sometimes it is what you do not know rather than what you do know that hurts you. Thus, he argued that it could be useful if the Secretary allowed the Task Force to see the report prior to submitting it to the EPA. Barker indicated that there could be material in the Secretary's response that the Task Force would not agree with. Barker said that he was sympathetic to Glauber's timeline; but this did not relieve his concerns.

Glauber agreed with Barker's concerns. However, Glauber indicated that even he did not know exactly what was in the Secretary's comments. To that extent, both myself and the Task Force are working under certain constraints.

Dr. John Sweeten (Texas A&M Agricultural Research Station) suggested that the Task Force should be submitting their concerns directly to the Secretary as well as providing a review of the USDA response to EPA.

Wakelyn questioned the Secretary's open discussion during a recent speech on the use of ethanol-based fuels and indicated that it is not really clear whether such a strategy would actually produce reductions in ambient surface-level ozone concentrations.

Glauber replied that this is why the Agency reviews speeches, to prevent misconceptions like this from happening. However, in this instance, it was not caught soon enough.

Cunha asked if the Task Force could select 4 or 5 members to review the points that the Secretary is going to be presenting to EPA, perhaps over a conference call, prior to the final submission of the report. Then, USDA could honestly state that it had conferred with Task Force or advisory group. Additionally, this would also give the Task Force members a sense of actually having contributed to the development of the USDA response to EPA.

Margheim asked if the Task Force would accept this motion?

Tristao acknowledged his support of the concept.

Barker also voiced his support. Barker indicated that he did not want to be put in a position where, after March 12, 1997, he would have to publicly state that as a member of the AAQTF he disagreed with certain fundamental points that the USDA Secretary had made to EPA.

Glauber indicated that he would be open to having this select group come to USDA tomorrow, or if it would be more convenient, he would endorse the conference call approach.

Dr. Robert Quinn (Eastern Washington University) commented that from their Work Group discussions, it was very clear that there was going to be a convergence of the major ideas. Once the pairing down is done later today, I think it will be obvious where our major issues are.

Ms. Phyllis Breeze (Colorado State) voiced her support for this concept, as long as the entire Task Force was provided the final information.

Margheim asked if each Work Group could appoint one member to participate in the conference call with Glauber?

Barker reminded Margheim that we needed to ensure the balance (FACA law) of views were included on this small Work Group (i.e., each group represented).

Margheim agreed with Barker's suggestion.

Wakelyn asked Glauber when USDA would be in a position to have this conference call? Wakelyn indicated that a good number of the Task Force members were staying through Friday, so perhaps the meeting could take place on Friday morning.

Glauber replied that his door was open, simply let him know what the Task Force wanted to do and when. He concluded that he would make himself available to accommodate the schedule of the Task Force members.

Work Group Presentations (Facilitated by Eric Scherer)

Eric Scherer explained to the public that the AATF organized themselves into four work groups the previous day to brainstorm issues that needed to be brought before this group. He explained that the next few hours would be spent presenting and considering the results of these efforts to the public meeting.

Work Group #1 - Dr. Phillip Wakelyn

Wakelyn began by stating that his Work Group did not generate any flip charts or summary information. However, he reminded the Task Force that their charge was considerably different than the remaining 3 groups. Wakelyn indicated that the charge to Work Group #1 was to study how USDA and EPA could form a relationship to best utilize the information provided by the AAQTF. The Work Group has the following suggestions/recommendations:

- (1) Sally Shaver will continue to be the EPA representative for this committee. Even if Mary Nichols attends, Shaver will also be in attendance to provide continuity. Shaver also indicated that EPA was developing a White Paper on implementation issues, and it should be available later this month.
- (2) The Work Group will provide direction that there would be a formal MOU between EPA and USDA on the utilization of information from this Task Force's efforts. Also, the Task Force would be folded into EPA's FACA process, and all the agricultural-related issues would be referred to this Task Force for resolution.

Barker asked what is the relationship between the Task Force and EPA?

Cunha stated that the Task Force would report directly to the EPA FACA Subcommittee, and directly to Administrator Browner if necessary. Cunha stated that the AAQTF should be the sole arbitrators on agricultural issues for EPA.

Breeze asked when the next meeting of the EPA FACA Subcommittee would occur?

Shaver responded that it would be sometime during the second week of April.

Tristao acknowledged that he would support this recommendation wholeheartedly.

Wakelyn asked if Bluhm would work with Chief Johnson and ultimately with Shaver to work out all the details of this MOU?

Barker stated that the Task Force needed to establish a protocol.

Wakelyn indicated that was what he was attempting to establish.

Work Group #2 - Dr. Keith Saxton

Saxton presented the Work Groups major findings:

- (1) EPA should defer to USDA authority on all agricultural air issues
- (2) Focus on addressing the issues at hand
 - Wind-blown PM
 - Inventory data gaps
- (3) Address conflicting objectives
 - Control burns versus proposed new standards
- (4) Standard measurement of PM
 - Address measurements for agricultural operations (our operations are inherently different from major point sources)

Saxton reiterated that the country needed a monitoring program that was consistent across the board and would adequately address agricultural air quality issues. It is not correct to simply say that agriculture is different.

- (5) Possible funding sources for research
 - EQIP funding
 - EPA funding
 - Crop check-off
 - ARS and CSREES (and land grant colleges) network

Saxton stated that in his opinion it was not good science (and prudent use of research funds) to have East Coast universities doing research and analyses on West Coast data bases. He indicated that the local climate was very important in resolving air issues, and that this could best be assimilated by local universities analyzing the data sets.

Jim Trotter (Farmer, Illinois) indicated that a possible source of funding could be the Crop Check-off funds. He elaborated on this concept saying that, for example, every bushel of a product sold has a percentage that goes to research, marketing, etc. Perhaps the Task Force could ask for some portion of these Check-off funds to foster research and data collection for some of these ideas/concepts. This would be an industry wide way to raise funds.

Tristao indicated that this would be an excellent way to get the stakeholders to buy into what we are trying to accomplish.

(6) Address natural events policy (i.e., wind events)

Saxton stated that there are currently 3 things that EPA will not regulate under the Natural Events Policy: volcanoes, wild fires and wind events. Wind events, however, is a real vague issue. EPA will have to work with the Agricultural Research Service (ARS) on quantifying this issue. Wind events are simply not meteorological events. Rather, wind events are highly dependent on the type of surface (e.g., vegetative cover, etc.) and the condition of the surface (e.g., moisture content, degree of roughness, etc.).

Shaver offered to send to Bluhm some information on the Natural Events Policy and what went into its development.

Breeze said that the Task Force needed more information on soil type and soil moisture because these were the two parameters that would help identify at what threshold we have exceedances due to high winds. Breeze stated that it had been her experience that these appeared to vary from state to state and even within counties/regions in a given state.

Saxton replied that this was another one of those issues that was multi-variate. EPA has acknowledged that wind erosion is a source of PM; but at this time EPA really does not know how to define it. USDA recognizes that it is a source, but we need to get to the next level of information, and the next level of data gathering effort is an agricultural issue.

Wakelyn asked if the Natural Events Policy only considered just vacant lands, for example in the desert southwest?

Saxton replied that this is more of an anthropogenic versus non-anthropogenic issue. Saxton indicated that these are two separate issues and that natural events are beyond the control of man.

Shaver state that EPA was really looking at health effects with the Natural Events Policy. She indicated that EPA was trying to recognize the agricultural efforts (e.g., Columbia Plateau) that were being done.

However, in the desert southwest, there was really nothing that could be done because this region was truly governed by “natural events” that are beyond our control.

Parnell stated that wind erosion pollution had a very real economic effect. He indicated that he had seen this first-hand in the Lubbock, Texas area. Parnell said that as a consequence of dust blowing from the west, Lubbock was designated nonattainment. However, this is now also covered under the Natural Events Policy. Parnell questioned, "What happens when you have both agricultural activities and natural events upwind, and do you have an exceedence?"

Shaver responded that the Agency had walked away from this issue in the Natural Events Policy. She stated that EPA did not try to determine between anthropogenic and non-anthropogenic events.

(7) Ozone Impacts

- Dispel myths
- Scrubbing effects
- Soil

Saxton stated that there is a natural scrubbing effect of native vegetation and crops that is affected by ozone concentrations. To my knowledge, this is not being expounded upon in any of the documents put forth by EPA at this time. He encouraged the Task Force to look at these potential environmental benefits from agriculture. He stressed that the Task Force needed to focus on both the benefits and the negatives of agriculture with respect to air quality issues.

Cunha suggested that if it was not for agricultural plants, the San Joaquin Valley could not have gotten their SIP approved. Cunha indicated that the air quality model incorporated the ozone scavenging effects (e.g., strawberries, etc.) and actually reduced the local ambient ozone concentrations.

Dr. Robert Flocchini (University of California - Davis) stated that when an epidemiological study is undertaken, the procedures of implementing such a project are very difficult. One of the biggest and most difficult problems to separate is the problem of smoking. As Parnell pointed out, if you are exposed to milligram-levels in a grain elevator for 8-hours per day and then are exposed to microgram-levels of a material the rest of the day, the 8-hour milligram exposure far outweighs the latter. Thus, Flocchini encouraged the Task Force to review indoor air quality versus ambient outdoor air quality. Flocchini also suggested that integrated issues should also be investigated. For example, he reminded the group of his almond harvesting example from yesterday's meeting, where the harvesting generates a PM problem while the vegetation actually serves to reduce ambient ozone concentrations.

Dr. Tom Ferguson (University of California - Davis) reminded the Task Force that occupational standards cannot be used for youngsters and the elderly because they generally do not work.

(8) Health Effects - Indoor air quality

Ferguson commented that he was disappointed to learn this morning that health effects would not be addressed in the Secretary's response to EPA. He stated there are pronounced cardiovascular effects from PM. Asthma cases receive a very significant contribution from indoor air quality problems (e.g., dust mites, allergies, etc.). However, we are looking at agriculture as a source of the pollutant that is credited with increasing cardiovascular problems. Ferguson urged the Task Force to review and research the cause and effect relationships between air quality and health issues much more completely.

Ferguson concluded by stating that if the air quality problems are in the cities (e.g., Bob Flocchini's presentation yesterday) we should be looking at these urban sources as well as the agricultural sources of PM.

Wakelyn stated that National Institute of Occupational Safety and Health (NIOSH) funding was being used to research agricultural health issues. Currently, there are 8 centers being funded by NIOSH. Wakelyn indicated that he had dealt with some of these individuals recently and that there was definitely an opportunity to direct some of their research efforts toward the issues the Task Force is interested in.

Barker suggested that NIOSH, USDA, the states, etc. are all attempting to address agricultural safety. However, none of these groups are talking to each other. Is there a single group that strives to bring all of this individual research together and disseminate this data?

William Hambleton (San Joaquin Air Pollution Control District) stated that he was not aware of any such effort. He said that in California these type initiatives are very localized.

Cunha replied that he would be in favor of disassembling NIOSH and getting rid of it. He stated that NIOSH deals with local situations only and those funds are not appropriately utilized. He indicated that in Southern California the Nisei Farmers League has worked very hard in recent years to get NIOSH funds used for the right purposes; but the League has for the most part been unsuccessful. He concluded that California had wasted their NIOSH funds. He said that these funds were expended and they never even consulted the doctors and experts on agriculture health-related effects.

Wakelyn suggested to Cunha that what was needed here was a model for this agency. The Wisconsin program does have an outreach component and it is working very successfully. So it can be done, the agency just needs a model to build from.

Parnell replied that when you look at indoor air pollution, you are really looking at the Occupational Safety and Health Administration (OSHA) and EPA. He stated that the indoor OSHA limits are not in line with the EPA NAAQS. Thus, there is a good deal of ambiguity when considering indoor air quality versus outdoor ambient concentrations.

Wakelyn reminded the Task Force that there is data that suggests that the proposed ozone standard would save agriculture a \$1B per year on crop yield increases. Have they really looked at all the costs/benefits that went into generating this figure?

Tristao responded that this research had been completed.

- (9) NRCS/ARS/CSREES establish an oversight team with contacts at EPA to focus critical research ideas (George Bluhm was suggested head of this team).

Dr. Saxton indicated that this last concept originated as part of the pattern which was established 15-years ago with Water Quality issues. He reminded the group that water quality evolved into a multi-agency initiative - EPA, USDA, USGS, etc. The group focused on nitrates and came together to implement policy and regulations. This how it was done with water and it worked quite well. Why not implement this approach again?

Sweeten suggested that this went back to the demise of the Farm Bill. Sweeten suggested that his approach needs some modification. He concluded that it needed modification 15-years ago and that it definitely needed it now! He stated that the water quality issues were implemented by George Bush at the Presidential level and it did work quite well.

Tristao indicated that the major point was to build on the successes of the past in other environmental programs. He reminded the Task Force that in the San Joaquin Valley there has been an MOU signed to get this multi-media process working.

(* The meeting was adjourned for a 15-minute coffee break ***)**

Work Group #3 - Dr. John Sweeten

Particulates: PM-10 and PM-2.5 Questions

- Constituents (levels, harmful(?), priority)
- Relative contributions - local sources
- Inventory, background, etc.
- Chemical characteristics versus source type
- Agriculture activities that contribute
 - Crops
 - Livestock (extensive vs. intensive)
 - Rangelands, etc.
- Cost benefit analysis
- Tools Needed to Measure PM-10 or PM-2.5

- Correlation (PM-10 vs. PM-2.5 vs. Other)
- Availability - in hands of researchers
- Consistency among/between methods
- Deployment of devices to determine
 - Concentrations - upwind vs. Downwind
 - Emission rates
- Best Management Practices (BMPs) for significant Agricultural Sources
 - Determination of effectiveness and documentation of effectiveness
 - Cost benefit analysis
 - Incentives
 - Who benefits versus who pays?
 - Consistency between and among methods

(Note: BMPs will most likely be cross-resource - including soil, water, air, plants and animals)

- Air Quality vs. Policy for Agricultural Sources (e.g., Farm Bill)
 - Farm Bill e.g., CRP lands vs. CAAA
- Interim Implementation of PM rules
 - Short term practices for
 - New strategies/practices for producers
 - Co-location of PM monitors with agriculture weather (e.g., potential evapotranspiration (PET) network, Mesonet, etc.)

Cunha asked if Sweeten believed the framework outlined above could include such things as the Endangered Species Act? Cunha indicated that air quality issues confronting agriculture could potentially conflict with other Federal agency initiatives.

Sweeten acknowledged that there was a whole list of things that could be included here that would leave the farmer in limbo. He stated that in his 25+ years of farm work, he had learned that if you get farmers confused, they simply stop doing anything. Sweeten said that the farmers approach in this situation was generally to say “you figure it out and then come back and tell us what it is that you want us to do”.

Odor and Odorants

- Develop fundamental knowledge
 - Processes, pathways, kinetics of the chemistry
 - Molecular and cellular levels
 - Odorant production, release, interactions, transport, control mechanisms
- Develop control Technologies

- Rations/feed additives (change the processes in the gut of the animal - changes the manure makeup)
- Treatment/handling
- Capture and treat gases (capture of bio-gasses)
- Dispersion (actual vs. Models)
- Odor versus Dust Interactions
 - Ammonia versus PM-2.5
- Odor/Odorant versus Social Impacts
- Deployment of Standardized Measurement Technologies and Devices
- GIS to preselect sites
 - Good sites
 - Problem sites

Sweeten stated that all Federal agencies have a good deal of Geographic Information System (GIS) information. He questioned when all of this information would be centralized and made available to the agricultural community.

Ozone

- Background levels in agriculture area
- Agricultural sources
- Precursors of ozone attributed to agriculture sources
- Contribution of urban sources (e.g., transport)
- Control measures - feasible
- Global climate change
- Chemical interactions
 - NO_x
 - O₃
 - CO₂
 - VOC
- Effects

Propose a USDA Air quality Initiative

- Presidential initiative
 - Patterned after the 1990 USDA Water Quality Initiative
 - Except, add coordinated research component e.g., LGU (Land Grant Universities) ERS (Economic Research Service) , ARS (Agricultural Research Service)

- Formally tie-in extension services, USDA

Cunha asked where would we put emissions inventories and data gaps as an element for discussion? He also questioned if USDA could be the sounding board to give emission inventory information to EPA?

Sweeten indicated that he preferred the approach outlined by Shaver in her presentation yesterday.

Cunha responded that this comment did not come from Shaver's presentation rather it was from Flocchini's presentation. Thus, he urged Sweeten to incorporate something in his charge similar to the "AP-43" discussions of yesterday that would be founded in USDA research and not EPA.

Sweeten added that his Work Group was interested in the determination of constituents, pollutant levels, whether they are harmful, etc. and this material would be taken directly from Flocchini's presentation.

Saxton questioned if this would be spelled-out in our formal MOU?

Shaver stated this approach seemed reasonable to her.

Breeze suggested that this topic would also be useful under the "tools" list as well.

Barker reminded the group that EPA has a vast array of resources and activities doing emission factor research. Barker questioned how the Task Force was going to prevent conflicting results and duplication of efforts here? He suggested that he thought that the Task Force needed a separate meeting to discuss this very concern. However, before the Task Force schedules such a meeting, Barker suggested that we needed to resolve these issues. Barker concluded saying that the Task Force did not need to replace the EPA and the States; but that the Task Force needed to complement these institutions.

Sweeten acknowledged that this was an excellent point.

Tristao requested to amend Barker's previous statement. Tristao indicated that the driving mechanism appeared to be the local attainment status of a region for developing these emission inventories/factors. He reminded the Task Force that the pollution in any given region comes from a variety of sources and is generally unique to a given location.

Cunha suggested that once these ideas were formulated, the Task Force could sit down and work with EPA's research people on these emissions issues. He stated that most regions are currently using the old AP-42 information to develop their emission inventories. He encouraged the Task Force to identify

these problems, then begin to fill in the data gaps. Cunha urged the Task Force to explicitly spell-out this information in the MOU.

Work Group #4 - Dr. Robert Quinn

Quinn indicated that Work Group #4 had come to consensus on a lot of the issues already presented. So, Quinn asked the group to be tolerant since a good deal of his presentation was going to be redundant. He reminded the Task Force that this was good since it implied that a good deal of progress had already been made.

Major Concerns

- (1) MOU be developed between Task Force and EPA to:
 - Establish a liaison person at EPA for communication (Presently NRCS has liaisons in each EPA regional office).
 - Provide appropriate research data and references to that data from EPA sources to Task Force members.
 - Provide means for research data for agriculture sector to be communicated to EPA.
- (2) Economic impacts must be considered in the process.
- (3) Clearer statement of management practices that can be utilized to meet standards and research support.
- (4) Continue research and communication toward a believable inventory (baseline data, instrument reliability, regional availability of inventory) - e.g., insure credibility to gain agricultural support
- (5) We support the use of the concept of the percentile aspect limit for air quality standards.
- (6) The “process” should use a systems approach to environmental quality issues - so that air quality standards and compliance are not jeopardizing soil, water, air, plants, and animals (environmental quality considerations).

Tristao added that he would like to commend Quinn’s Work Group on their adoption of point number 5.

Breeze objected to Tristao’s comment and indicated that people in the west would definitely have problems with point number 5. She indicated that the consensus at the state level was that we categorically do not support the percentile limit, especially at the 99 percentile. From where I sit, I cannot support this at this time.

Quinn added that in the Columbia Plateau region this procedure would help his agency show attainment.

Saxton suggested that the wording of this in the current proposal for a percentile limit was a confused mix of statistics, upper limits and mathematics. He suggested the proposal be rewritten in a clear, concise manner.

Ferguson said that there are certainly some pollutants, especially ozone, that should be regulated even higher than the current percentile method.

Quinn asked if this percentile concept would be pollutant specific?

Cunha suggested this gives us something to talk about at future meetings. Cunha indicated that he was in favor of the 98%- 99% concept because it gives the Task Force a good starting point.

PUBLIC COMMENTS ON THE WORK GROUP PRESENTATIONS

Frank Thornton (Tennessee Valley Authority) stated that he would like to applaud the individual Work Groups on a fine effort. With regard to ozone uptake by plants and plant canopies, Thornton suggested that the Task Force could not have its cake and eat it too! He stated that you could not have plants taking up ozone and have agricultural practices that are producing pollution precursors. Secondly, Thornton urged the Task Force to continue the debates on ozone and PM with respect to the global climate issue. Finally, in terms of modeling efforts, Tennessee Valley Authority (TVA) has heard about these programs. However, TVA is not sure exactly what inputs the agricultural community has in the Ozone Transport Assessment Group (OTAG) process, but it would be useful to see how agricultural concentrations would effect the OTAG process and results. Thornton concluded that he would also like to thank George Bluhm for giving TVA the opportunity to respond.

Cunha stated that his group was funding a study on soil NO_x in the San Joaquin Valley. Cunha indicated that they are currently reworking this study, including PM-2.5. The first study showed very small amounts of soil NO_x actually coming from the soil. A second study proved to be totally different and showed a large amount of NO_x coming from the soil. Thus, we are now doing some studies with Dr. Ralston at UC-Davis to re-check this information.

Thornton indicated that TVA had made over 30,000 separate measurements with different crops, and a number of 5% was attributed to agricultural practices. He suggested that this number could be a good general number; however, ozone is an episodic problem and such generalizations probably are not valid for this pollutant.

Wakelyn suggested that if you look in the ozone Criteria Document, EPA does not really acknowledge that biogenic emissions are very important.

Thornton suggested that this statement depends on whether you were in a NO_x- or VOC-limited environment. He suggested that it was his opinion that we would begin to see a good deal more controls on NO_x in the future. Thus, Mr. Thornton cautioned the Task Force about making such general or blanket statements.

Gary Baise (Equipment Manufacturers Institute, General Counsel) stated that he had joined the meeting in the middle of the discussion on crop loss yields. He suggested that what the Task Force really needed were the conclusions from EPA's CASAC Report. He stated that when CASAC reviewed the secondary standard, they agreed that there was some damage occurring to vegetation at the current ozone levels. However, CASAC felt that the results were uncertain at this time. Secondly, there are established Air Quality Control Regions (AQCRs) in the U.S. and four monitors within the AQCR must "trip" over a three-year period to move you into nonattainment. Baise asked when would EPA address this issue?

Shaver said that for ozone, EPA is going to a concentration-based form of the standard and was getting away from the current exceedance-based form of the standard. Shaver indicated that for the fine particulates (e.g., PM-2.5), the monitoring location and the spatial averaging is addressed in the Part 58 policy which is currently available. She concluded that there are provisions in the current policy to handle this.

Baise suggested that the resolution of these issues should be very important topics for the Task Force. Finally, with respect to the comments I made at the close of yesterday's meeting on EPA's pollution mortality assumptions, I would like to readdress this subject. The Center for Disease Control (CDC) has shown that there is increased mortality because of pollution. Another study has shown that there was no relationship between air pollutants and mortality issues. This second study did acknowledge the increase in mortality but found no correlation between the deaths and the increased pollutant concentrations.

Barker stated that he had asked yesterday for some statistics on the mortality issue and that Baise would briefly present the material at this time.

Baise indicated that both of the documents he would be referring to were developed by George Wolff, Chairman of the CASAC committee. He also indicated that copies were being distributed around the room at this time. Additionally, Baise stated that 5 Democratic Senators announced today that they would be opposed to EPA's proposed changes to the ambient air quality standards. This is not a ground swell but it does show that there are some real concerns about changing the standards as currently proposed. Baise also suggested that the small business community of the country is currently attempting to affect the regulatory process in a similar manner by banding together on the key technical issues in the EPA proposals.

Wakelyn questioned Shaver's promulgation of July 19, 1997 for the new rules on ozone and particulate matter indicating that this date was on a Saturday.

Shaver replied that this meant that the rules would appear in the **Federal Register** on Friday, July 18, 1997.

Parnell asked if he could digress from the issues for brief moment. He stated that there is a perception on the part of the engineering and scientific community that agricultural engineers are somewhat less than “brilliant” when it comes to science. Thus, Parnell indicated that agricultural engineers receive very little respect from the environmental community when discussing something as complex as air pollution. The EPA report was reviewed by many eminent scientists; however, this does not mean that they were the only qualified scientists. Parnell stated that to be against the NAAQS is perceived to be against clean air and that he vehemently opposed this assumption! He reminded the Task Force that simply changing the NAAQS does not equate to clean air. The new NAAQS are going to have a significant economic impact on the general public. Parnell stated that he would disagree with Manuel Cunha’s statement that agriculture is a small industry in this country; agriculture is in fact a very large American industry that employs a number of people. Thus, he urged the Task Force to remember that being against the NAAQS did not equate to opposing clean air. He stressed in conclusion that the new NAAQS will not impact the large, stationary point sources (as in the past) rather the general public will be the targeted sources. Parnell said that everyone thinks the agricultural community should be in favor of the new NAAQS because of the alleged \$1B annual savings; however, he stated that he was not buying that line because he had serious doubts about the validity of those figures and how they were generated.

Tristao agreed with Baise’s comments regarding monitoring and monitor placement. However, Tristao stated that he did not feel this Task Force was the forum to hold such discussions. Secondly, Tristao indicated that there are agricultural institutions available (e.g., American Society of Agronomy) which could help us get our messages out and into the hands of the American farmer.

Shaver stated that she would deliver another set of pie charts next week, which are more representative of the fine particulates and should clarify some of the issues for the Task Force.

Baise indicated that a good document for some basic reading was “Controlling Particulate Emissions”.

Tristao disagreed with Baise because this document was based on erroneous data generated by a contractor.

Wakelyn stated that the agricultural data used in this report was actually from the 1960s and 1970s.

Sweeten indicated that the cattle feed lot data was from 1970 and 1971 from a feed lot in the central valley of California. He reminded the group that currently California feeds less than 5% of the cattle in America today and that the climate in Southern California was drastically different than that of the Great Plains and Texas (where the majority of cattle are being raised, today). He stated that the contractor that did the research went back and looked at the data base, and did some projections, and stated that these data are worst case estimates. However, there was very little quality assurance/quality control (QA/QC) involved with the report.

Cunha stated that the 1974 - 1978 information that appears in the STAPPA/ALAPCO report was in error; grossly in error. Cunha indicated that EPA did the best they could with the initial information that was provided to them; however, the contractor mixed apples and oranges in putting together the final version of the report.

Barker replied that it was very useful to “kick” research around, especially when it was judged to be based on poor science. Barker reminded the Task Force that this was part of the AAQTF Charter. Barker indicated that the Agency should consider itself lucky that they were called to validate the information. He stated that for most agricultural research efforts, that this was generally not the mode of operation! Barker questioned what the protocol was for individuals on the Task Force to communicate and transfer information among themselves? He asked if the individual members could participate in an information exchange at their own risk?

Bluhm stated that he would let Scherer address this issue; but, we are trying to organize all this information/material and get it distributed to each person. We will try electronic mail, set-up conference calls for the Work Groups, etc. Bluhm recognized that communication was a key element in the overall success of the Task Force. In conclusion, Bluhm stated that anything that is discussed in Work Groups or other sidebar conversations, must be reported back to the entire Task Force, before it is a AAQTF product.

(* The meeting was adjourned for 1-hour for lunch ***)**

Scherer said that during the lunch break, the individual Work Group presentations were grouped according to key air quality issues as follows:

- (1) MOU between USDA and EPA
- (2) Oversight (how do we mesh the conflicting policies) (e.g., use the water quality model as an example)
- (3) Knowledge or lack of knowledge (current state-of-the-science)
- (4) Monitoring issues
- (5) Process (technology exchange between USDA and EPA)

Scherer indicated that we needed an individual to be a spokesperson for each of the 5 groups outlined above. He stated that we needed a total of 8 individuals to be key contact persons beyond the two assigned to the MOU. The following persons volunteered for these leadership positions:

MOU

Sally Shaver and George Bluhm

Knowledge

- Issue of the 98%-99% Percentile Question

Phyllis Breeze

- Health Effects in General

Tom Ferguson

- Research Issues for PM

Manuel Cunha

Odor/Odorant Research

John Sweeten

Ozone Issues

Joe Miller

Oversight

William Hambleton

Monitoring Tools

Calvin Parnell

Process

Dennis Tristao

Scherer reminded the Work Group that these key contact person are merely the facilitators, and that he/she should go outside of the individual group to gather the necessary information.

Wakelyn commented that Ms. Breeze would need to work with EPA on the Percentile issue, because it is part of the current proposal EPA which is already on the table.

Parnell questioned what the issue was with the percentile method?

Quinn stated that Ms. Breeze indicated that this method could be too permissive in certain areas. However, for the Pacific Northwest, it would actually be a benefit!

Wakelyn urged that group to adequately scope/frame all of the issues, prior to each Work Group going on their respective data collection missions.

Bluhm suggested that there are probably EPA people who can contribute to each of these smaller Work Groups.

At that point Scherer pointed out that we now have contracts for each major issue but limited staff to accomplish any work. Therefore, he provided each member with colored dots to do multi-voting. The objective was to select the top five issues to develop action plans before the second meeting day was done. Action plans for the remainder of the issues will be developed at later meetings.

Scherer identified the key issues for day 2 as:

1. Major Research Issues, Particulate - Manuel Cunha
2. Percentile Issue - Phyllis Breeze
3. Oversight - Bill Hambleton
4. Monitoring - Calvin Parnell
5. Odorants - John Sweeten

Scherer stated that each of these groups needed to determine what, who, how, where, and when for each of the above issues, prior to leaving the meeting today. Scherer indicated that he was essentially asking each group to develop an action plan.

Action Plan 1**Major Research Issues, Particulates - Manuel Cunha****A. Inventory**

- Emission Data
- Most Recent Data
- Urban/Rural Data
- Specific Agricultural Activity Data
 - crops
 - rangelands
 - livestock/fowl (confined)

B. Constituents/Speciation

- Chemical characteristics (e.g., VOCs, NH₃, SO₂, H₂S, CO, organics, Si and other elements)
- Biological Characteristics
- Pollen, fungi, bacteria and endotoxins

C. Assessment of Relative Contribution

- Agriculture versus other Sources

Cunha stated that his group would ask EPA and USDA for funding to support this work. Additionally, he indicated that this group would work with UC-Davis and EPA/RTP to pull together this information. The ARS, NRCS and CREES will also be tied into this research.

Cunha asked if UC-Davis could handle this task?

Flocchini responded that this was one of the reasons that he came to this meeting, to see where his skills could be best utilized. He indicated that UC-Davis would be more than willing to serve as the facilitator for bringing all this information together to support the Task Force. However, he cautioned the Task Force that there was other research, which was not being conducted at UC-Davis, that also must be included.

Cunha asked what the time frame would be for accomplishing such a task? Cunha stated that it would be great to finish this task before the next meeting. Specifically, he asked Flocchini to address what has been done in the past, what is going on today, and where do we need to go in the future. Cunha indicated that this might be optimistic thinking, but that he thought this could be accomplished prior to our next Task Force meeting.

Flocchini asked when the next meeting would be?

Cunha responded that it should be in late May or early June.

Flocchini said that he did not have a problem with this time table, as long as the document was considered a dynamic report, which would be continually upgraded as new information was made available.

Barker asked that engine emissions be considered as part of the inventory work.

Cunha replied that this certainly would be included in their estimates.

Barker clarified his point stating, that there was a difference between engines emitting pollutants, and the equipment producing dust.

Saxton stated that everything should be considered in these analyses, and that it should go without saying, but that everything should be conclusive and peer reviewed.

Action Plan 2

Percentile Issue - Deals with BMP - Phyllis Breeze

Fundamental Statement: Each area varies on a regional basis.

A. Variables

BMP design needs to be based on regional variables

- Climate (precip, airsheds, temp, etc.)
- Soil
- Crops

B. BMPs Attributes

- Locally Developed (NRCS, Resource Conservation District (RCD), producers)
- Innovative - (on an ongoing basis, flexibility)
- Technologically effective and feasible
- Economically Feasible
- Menu of choices/options

C. BMP Technology

- Research Element (USDA, ARS, CSREES)
- Research Funding (e.g., link to \$\$)
- Facts figures provide baseline tools

D. Conceptual Statement

Task Force recommends that USDA provide EPA with BMP guidance.

E. National Level

- USDA will develop the knowledge base to be followed at the National level
 - Research, facts, data provided as baseline tools for application of BMP development
 - BMP should be systematically integrated into all policy

F. Local Level

- Stakeholders will participate in development of BMP

When should all of this be implemented: Jan 1, 2000 through Jan 1, 2005

Breeze reminded the group that this effort was contingent upon the results of other efforts, and thus, we cannot move too quickly until some of the other information is gathered and disseminated to the group.

What is needed: Money!!!

Oversight - William Hambleton

Issue #1: Policy analyses required

What: Matrix on current program policy versus proposed federal policy to illuminate inconsistencies regarding agricultural air quality.

Who: USDA

When: Immediately

Issue #2: Research, what is being conducted and what is proposed?

What: Matrix on current versus proposed research regarding agricultural air quality.

Who: USDA

When: June 16

Issue #3: Present versus proposed research finding in Agricultural air quality.

What: Spreadsheet showing research objective versus where the research is being completed with the funding level entered at the intersection.

Who: USDA

When: June 16

Issue #4: Funding for Rural America as a potential fund source

What: Encourage Secretary to use Funding for Rural America for agricultural air research and technical transfer

Who: Air Task Force

When: Immediately

Issue #5: USDA Air Quality Initiative

What: Encourage Secretary to examine the feasibility of developing multi-agency USDA air quality initiative, for example, pilot basis in initial selected airsheds that is patterned after or builds upon the successful 1990- 1996 Water Quality Initiative.

Who: Air Task Force and USDA

When: 1998

Action Plan 4

Monitoring - Dr. Calvin Parnell

Action Item 1: Standard Measurements

Goal: Develop an Action Plan

Objective: Provide accurate measurements

Standard measurements of PM

- TSP
- PM-10
- PM-2.5

Tools

- Equipment is available to measure PM-10, PM-2.5 and TSP
- Creative and innovative sampling protocol
 - Potential sources
 - Variations among sources
- Quality Assurance
 - Good science and engineering
 - Peer Review
 - Validation of flow devices (e.g., 3rd party validation)
 - Not a requirement that the sampling techniques be EPA certified
 - Seek EPA input in evaluating “Cr & Tn” sampling technique
- Special needs for obtaining accurate measurements of PM-2.5 (portability)
- Justify by peer review publications.
- Ratio of PM-2.5/PM-10 will likely vary by location changes in composition.

Flocchini encouraged strong research communication and a set research protocol be developed.

Action Item 2: Establish the measurements standard

ASAE standard for PM-2.5 measurements - Texas A & M University (TxA&MU) and UC-Davis

Protocol documentation using American Society of Agricultural Engineers (ASAE) standards and publications

For research purposes: standard reference method; samples are too bulky.

For Accuracy in Emission Rates Calculating:

- Must include a thorough analysis of variables used in calculations
- EPA approved or endorsed protocols cannot be used as an excuse not to do this analysis

Barker stated that we need to see some type of time line that summarizes all of these different issues which are being discussed.

Tristao asked if it was a legislative time line driving the implementation process, or was science driving the issue? He indicated that this was a real dilemma for his thinking.

Action Plan 5

Odorants - Dr. John Sweeten

Action: We need a plan for odors - a coordinated research extension for addressing odor release, transport and control.

-Alternative plans

Who: The members of the 12-state land grant consortium
-USDA Secretary
-Individual teams of scientists at the 12 land-grant universities (or other partners they may choose)

When: FY98 and beyond as specific projects are identified.

Resources: FY97 - \$25,000
FY98 - FY01 is \$1Million /year into this research center

FY98 - FY01 approx. \$1Million/year from other funding sources

Margheim recognized that Chief Johnson had just walked into the room, so he requested that Johnson have the floor to make the closing remarks.

Paul Johnson (Natural Resource Conservation Service) stated that the Deputy Secretary of Agriculture sends his regrets for not making the meeting. The Deputy has a very strong feeling about this Task Force and the challenges/mission that are on the table. Johnson then personally recognized the individual members of the Task Force, and presented them with a Certificate of Appreciation for their participation in the Agricultural Air Quality Task Force.

Bluhm asked that the Task Force members gather in the rear of the room for a group picture, prior to the meeting adjourning, and individuals heading for the airport. He asked the members to consider a possible date for the next meeting during this interim period.

Margheim stated that based on the discussions prior to the group picture, the Agricultural Air Quality Task Force would hold its next meeting in Fresno, California, beginning on June 17, 1997.

Chief Johnson again thanked each of the Task Force members for attending, and also thanked the members of the general public for participating. Johnson stated that seeing no further information before

the Task Force at this time, that he would declare the meeting adjourned. He said that he would see everyone in Fresno in June!